

## Sorting

Sorting is the process of rearranging data in a range or a sheet according to a specified sort order. In Calc, sorting is commonly done using the Sort dialog, which is accessed by selecting **Data > Sort** on the Menu bar. How to use this dialog and its options is described in further detail in Chapter 2, Entering, Editing, and Formatting Data. Here, we present how to sort data in the context of macros.

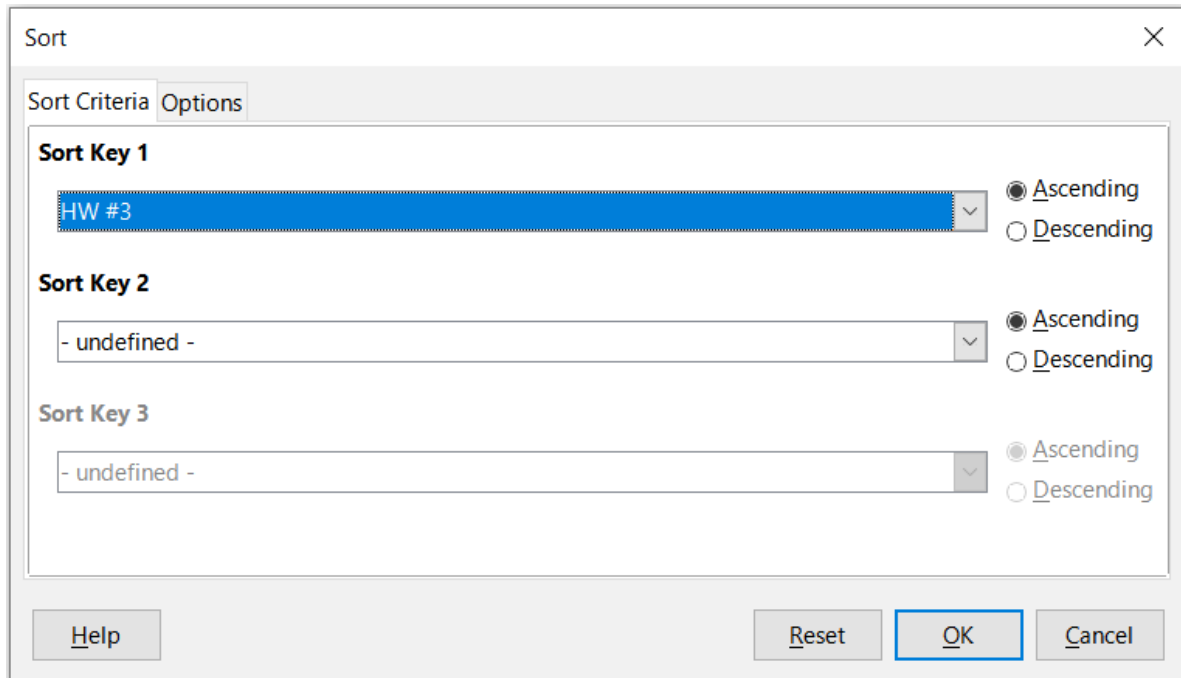


Figure 461: Sort dialog

### Sorting a table using one column with a macro

In a Calc macro, data within a range is sorted by calling the `sort()` method on the range object. When a sort operation is called on a range, an array of properties known as a *sort descriptor* is passed to the `sort` method. Contained within a descriptor's properties are *sort fields*, which are structures that inform Calc how to sort a range according to the data contained within one of its rows or columns.

As an example, the macro in Listing 21 sorts the grade sheet from Figure 452 according to average grade in descending order. The results are shown in Figure 462.

*Listing 21: SortAverageGrade sorts the grade sheet data range (A1:H11) using a single column*

```
Sub SortAverageGrade
    Dim oSheet
    Dim oRange
    Dim oSortFields(0) as new com.sun.star.util.SortField
    Dim oSortDesc(0) as new com.sun.star.beans.PropertyValue

    oSheet = ThisComponent.Sheets(0)
    REM Set the range on which to sort
    oRange = oSheet.getCellRangeByName("A1:H11")
```